



Attorney Docket: XY-Equine3-USNP
Express Mail No.: EV419717125US

IN THE UNITED STATES PATENT AND
TRADEMARK OFFICE

Application Number: 09/744,675
Applicants: Edward L. Squires, Patrick M. McCue, George E. Seidel
Filed: January 29, 2001
Title: Equine System for Non-Surgical Artificial Insemination
TC/A.U: 1634
Examiner: Carla J. Meyers
Assignee: Colorado State University through its agent Colorado State
University Research Foundation
Attorney Docket: XY-Equine3-USNP
Customer No.: 33549

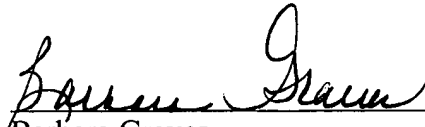
CERTIFICATE OF EXPRESS MAILING

I, Barbara Graves, hereby certify to the truth of the following items:

1. I am an employee of Santangelo Law Offices, P.C., 125 South Howes, 3rd Floor, Fort Collins, Colorado 80521.

2. I have this day deposited the attached Affidavit under 37 C.F.R. § 1.132 with the United States Postal Service as "Express Mail" for mailing to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated this 27th day of May, 2004



Barbara Graves



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AFFIDAVIT UNDER 37 C.F.R. § 1.132

UNITED STATES OF AMERICA)
STATE OF COLORADO)ss.
COUNTY OF LARIMER)

I, Edward L. Squires, Ph.D., duly sworn and under oath, declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true.

I currently am employed as a Professor in the Department of Biomedical Sciences, College of Veterinary Medicine at Colorado State University in Fort Collins, CO. I have been employed in this capacity continuously since 1976, and currently am tenured. My duties in this position include conducting research in the field of animal reproduction. My research activities have included research conducted at the Animal Reproduction and Biotechnology Laboratory on the campus of Colorado State University in Fort Collins, CO. My research activities further have included the authorship and publication of various academic and professional articles.

I am a co-inventor on the above-referenced application (the "Application") and am aware of the specification and the amended claims regarding the same. I understand that stricken text in the amended claims was in the version reviewed by the examiner and is being deleted in the current response and amendment. I further understand that underlined text in the amended claims represents additions to the claims not yet reviewed by the examiner in the current response and amendment. I have reviewed claims 136 and 137 (the "Subject Claims") as currently pending, as set forth in Exhibit A of this affidavit. With regard to my review, I have focused upon and directed my comments to only the Subject Claims as currently pending in this Application, and it should be understood that my comments are directed to the Subject Claims only and do not apply to other claims, about which I make no comment at this time.

I also am a co-author of the publication Schmid, R. L., et al, "Fertilization with Sexed Equine Spermatozoa Using Intracytoplasmic Sperm Injection and Oviductal Insemination", 7th International Symposium On Equine Reproduction, pp. 139 (1998) (the "Publication"), and am aware of the same. I have reviewed the Publication as set forth in Exhibit B of this affidavit.

I further am aware of the communication from the U.S. Patent and Trademark Office dated October 7, 2003 (the "Office Action"), as pertains to the Application. I have reviewed those comments of the Office Action that pertain to the Publication, as set forth in Exhibit C of this affidavit.

Based on my review of the foregoing, I am in a position to make the following conclusions regarding the same.

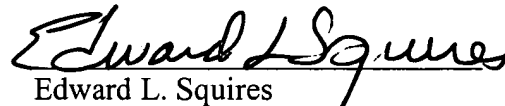
In addition to myself, the authors of the Publication were R.L. Schmid, H. Kato, Y.G. Chung, L.A. Herickhoff, J.L. Schenk, and P.M. McCue. With respect to those portions of the Publication relating to the Subject Claims, the work performed by R.L. Schmid, H. Kato, and Y.G. Chung was subject to my direction and supervision. As such, the foregoing did not contribute any inventive subject matter with regard to selection of the quantity of sperm cells used in the insemination sample nor with regard to selection of the insemination sample volume. With respect to those portions of the Publication relating to the Subject Claims, L.A. Herickhoff and J.L. Schenk served as technical consultants from XY Inc., a licensee of the invention set forth in the Application. As consultants, the role of L.A. Herickhoff and J.L. Schenk was limited to contributing technical assistance with sperm-sorting capabilities subject to my direction and supervision. As such, the foregoing did not contribute any inventive subject matter with regard to selection of the quantity of sperm cells used in the insemination sample nor with regard to selection of the insemination sample volume. P.M. McCue is both a co-author of the Publication and a co-inventor on the Application.

In addition to myself, the inventors on the Application are P.M. McCue and G.E. Seidel. P.M. McCue is both a co-author of the Publication and a co-inventor on the Application. G.E. Seidel did not participate in the authorship of the Publication.

As described in the foregoing, R.L. Schmid, H. Kato, Y.G. Chung, L.A. Herickhoff, and J.L. Schenk were co-authors of the Publication but did not contribute any inventive subject matter for the same with regard to selection of the quantity of sperm cells used in the insemination sample nor with regard to selection of the insemination sample volume. G.E. Seidel is a co-inventor on the Application but is not a co-author of the Publication. P.M. McCue and myself are both co-authors of the Publication and co-inventors on the Application. Consequently, the subject matter set forth in the Publication with regard to the Subject Claims is limited to describing the own work of the applicants listed on the Application.

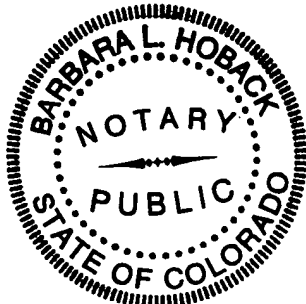
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the Application or any patent issued thereon.

DATED this 20th day of May, 2004.


Edward L. Squires

UNITED STATES OF AMERICA)
STATE OF COLORADO)ss.
COUNTY OF LARIMER)

SUBSCRIBED AND SWORN to before me in the County of Larimer, State of Colorado, United States of America, by Edward L. Squires this 20th day of May, 2004. WITNESS my hand and official seal pursuant to the authority vested in me as a Notary Public by the State of Colorado.




Notary Public
My Commission Expires: 2-19-06